



May 20, 2011

The Honorable Dow Constantine, Chair and County Executive
King County Growth Management Planning Council
c/o Paul Reitenbach
900 Oakesdale Avenue SW
Renton, WA 98057-5212

Subject: Comments on the update to the King County Countywide Planning Policies
Sent via e-mail

Dear Chair Constantine and Members of the King County Growth Management Planning Council:

Thank you for the opportunity to comment on the update to the King County Countywide Planning Policies. Futurewise strongly supports the update. Like any set of policies, the countywide planning policies need to be periodically reviewed and updated to reflecting the changing needs of the community and changing requirements.

Futurewise is a statewide nonprofit organization. Our mission at Futurewise is to protect our rivers, lakes, and Sound; save local farms and habitat; and build great, healthy communities. We have members throughout Washington State, including King County.

This letter contains our final recommendations to the interjurisdictional staff for the update. The letter focuses on (1) *Vision 2040* implementation, (2) greenhouse gas reductions, (3) transit-oriented communities, (4) housing targets and measurements, (5) protection of rural areas and resource lands, and (6) environment and habitat protection. In addition, we've enclosed a line-by-line of all recommended necessary changes. We thank the staff and the Growth Management Planning Council in advance for considering them. We also expect to provide our final recommendations to the Council in advance of the scheduled June 27 public hearing.

1. Fully implement Vision 2040, Regional Growth Strategy, and Multi-County Planning Policies

Vision 2040 and the multicounty planning policies are the long-term vision and land use plan for the four-county Central Puget Sound region, and the multicounty planning policies were adopted by King County's elected officials together with the elected officials of the other three counties. *Vision 2040* a major step forward to achieve the goals we all share: a vibrant economy, more high quality family wage jobs, environmental stewardship including the recovery of Puget Sound, improved mobility, lower cost public facilities and services, better protection of working farms and forests, and better protection of the region's rural character. We appreciate that the King County Growth Management Planning Council is working to update the countywide planning policies to incorporate *Vision 2040* and the multicounty planning policies (MPPs).

This update is important for two reasons. First, state law requires the countywide planning policies to be consistent with – and implement – *Vision 2040*, the regional growth strategy, and the multicounty planning policies. Second, this is the first major update in 20 years, since the beginning of the state Growth Management Act, and it is likely this will be the last major update for the next 20 years. With that in mind, the CPPs should do more than reflect changes in state law and planning practices, but also set a framework to deal with our most pressing challenges over the next two decades and to promote cutting-edge planning that will better achieve our region's values, vision, and goals.

The general approach of the proposed CPP update is to set achievement of *Vision 2040* and the Regional Growth Strategy as a goal rather than policy. Futurewise believes this is the wrong approach. Consistency and implementation of *Vision 2040* and the Regional Growth Strategy are requirements, not goals. Here are two where we think *Vision 2040* and the Regional Growth Strategy should be specifically called out in policy:

DP-4 Concentrate housing and employment growth within the designated Urban Growth Area, consistent with *Vision 2040* and the regional growth strategy. Focus housing growth within countywide designated Urban Centers and locally designated centers. Focus employment growth within countywide designated Urban and Manufacturing/Industrial Centers and with locally designated centers.

DP-8 Allocate residential and employment growth to each city and unincorporated urban area in the county to meet the following objectives:

- ...
- To plan for a pattern of growth that ~~is consistent with~~ implements the Regional Growth Strategy contained in *VISION 2040* including focused growth within cities with countywide designated centers and within other larger cities, limited development in the Rural Areas, and protection of designated Resource Lands;
- ...
- To allocate growth to individual Potential Annexation Areas (PAAs) within the Urban unincorporated area ~~consistent with~~ as guided by the capacity for housing and employment growth within each PAA when consistent with the Regional Growth Strategy contained in *Vision 2040*.

With regard DP-8, the recommended necessary changes not only better calls for implementation of *Vision 2040*, but also assures the section will not undermine the intent of *Vision 2040*.

2. Exceed Our Proportional Share of Greenhouse Gas Reductions

Our biggest collective challenge is mitigating and adapting to climate change over the next ten to forty years. The *Impacts of Climate Change on Washington's Economy: A Preliminary Assessment of Risks and Opportunities* concluded that: "Climate change impacts are visible in Washington State and their economic effects are becoming apparent."¹ The University of Washington's Climate Impacts Group recently finished an analysis of the impacts of climate change on Washington State. They concluded that the

[p]robable impacts associated with projected 21st century change in Northwest climate include the following:

- **April 1 snowpack is projected to decrease by 28% across the state by the 2020s, 40% by the 2040s, and 59% by the 2080s compared with the 1916 – 2006 historical average.** As a result, seasonal streamflow timing will likely shift significantly in sensitive watersheds.
- ...
- **Due to increased summer temperature and decreased summer precipitation, the area burned by fire regionally is projected to double by the 2040s and triple by the 2080s.**⁴ The probability that more than two million acres will burn in a given year is projected to increase from 5% (observed) to 33% by the 2080s. Primarily east of the Cascades, mountain pine beetles will likely reach higher elevations and pine trees will likely be more vulnerable to attack by beetles.

¹ Washington Economic Steering Committee and the Climate Leadership Initiative Institute for a Sustainable Environment University of Oregon, *Impacts of Climate Change on Washington's Economy: A Preliminary Assessment of Risks and Opportunities* p. 7 (Washington State Department of Ecology and State of Washington Department of Community, Trade, and Economic Development: November 2006). Accessed on October 28, 2009 at: <http://www.ecy.wa.gov/pubs/0701010.pdf>

- **Although few statistically significant changes in extreme precipitation have been observed to date in the Puget Sound, the Spokane area, or Vancouver/ Portland, regional climate model simulations generally predict increases in extreme high precipitation over the next half-century, particularly around Puget Sound.** In that region, existing drainage infrastructure designed using mid-20th century rainfall records may be subject to rainfall regimes that differ from current design standards.
- **Climate change in Washington will likely lead to significantly more heat- and air pollution-related deaths throughout this century.** Projected warming would likely result in 101 additional deaths among persons aged 45 and above during heat events in 2025 and 156 additional deaths in 2045 in the greater Seattle area alone.⁵ By mid-century, King County will likely experience 132 additional deaths between May and September annually due to worsened air quality caused by climate change.

⁴ Relative to 1916 - 2006.

⁵ Relative to 1980 - 2006.

The significance of these regional consequences of climate change underscore the fact that historical resource management strategies will not be sufficient to meet the challenges of future changes in climate. Rather, these changes demand new strategies.²

The Impacts of Climate Change on Washington's Economy: A Preliminary Assessment of Risks and Opportunities identified a variety of economic effects:

- Federal and state costs of fighting wildfires may exceed \$75 million per year by the 2020s (a 2°F warming), 50 percent higher than current expenditures.
 - Water conservation expenditures to offset the decline in firm yield of Seattle's water supply due to climate change impacts could exceed \$8 million per year by the 2020s and \$16 million per year by the 2040s.
 - Tourism and recreation revenues may be reduced in some localities due to forest closures and smoke intrusion associated with larger, more frequent wildfires.
 - Hydropower revenues may be affected as stream flow regimes change in response to rising temperatures.
 - Consumers could face water price increases in some basins that supply municipal water.
-
- New sea level rise projections could trigger costly re-design of some long-term investments in shoreline protection such as Seattle's Alaskan Way seawall and critical infrastructure such as bridges and culverts.
 - Cumulative economic effects larger than the sum of individual sector or regional effects may occur due to interactions between industries and economic sectors.³

In addition to these costs, the report also identified benefits concluding that:

² Littell, J.S., M. McGuire Elsner, L.C. Whitely Binder, and A.K. Snover (eds); *The Washington Climate Change Impacts Assessment: Evaluating Washington's Future in a Changing Climate - Executive Summary* in *The Washington Climate Change Impacts Assessment: Evaluating Washington's Future in a Changing Climate* pp. 1 – 2 (Climate Impacts Group, University of Washington, Seattle, Washington: June 2009). Accessed on May 20, 2011 at: <http://www.cses.washington.edu/db/pdf/wacciaexecsummary638.pdf>

³ Washington Economic Steering Committee and the Climate Leadership Initiative Institute for a Sustainable Environment University of Oregon, *Impacts of Climate Change on Washington's Economy: A Preliminary Assessment of Risks and Opportunities* p. 8 (Washington State Department of Ecology and State of Washington Department of Community, Trade, and Economic Development: November 2006).

efforts within the state to reduce greenhouse gas emissions, as well as action to prepare for impacts that appear all but inevitable, will create economic opportunities. Among the key opportunities, this assessment emphasizes initiatives in transportation, biofuels, renewable power, energy efficiency, and carbon capture. These emerging industries can help the state achieve greenhouse gas mitigation and climate change adaptation goals, while enhancing Washington's capacity to export technology and expertise to trading partners around the nation and world seeking to meet the challenges of climate change.⁴

We appreciate and support the references to greenhouse gas emissions and adaptation in the proposed countywide planning policies. These would be strengthened by including a goal for the reduction greenhouse gas emissions in the countywide planning policies. This goal should, at a minimum, be consistent with Washington State's greenhouse gas emissions limits. These standards limit greenhouse gas emissions to no more than the 1990 level by 2020, to 25 percent below the 1990 level by 2035, and 50 percent below the 1990 level by 2050, or 75 percent below the state's expected emissions that year.⁵

The King County Growth Management Planning Council should consider a goal with greater reductions as there is strong evidence that these emissions reductions will not be sufficient to stabilize greenhouse gas emissions at levels that would minimize the adverse effects of global warming. To stabilize atmospheric carbon dioxide equivalents at a concentration of 450 parts per million (ppm), greenhouse gas emissions need to be reduced by 80 to 95 percent below the 1990 level by 2050 in developed countries.⁶ More recent studies show even this level of atmospheric carbon dioxide equivalents may be too high to stabilize the climate at a level that does not produce serious adverse impacts on the human and natural environments and the economy, and that adaption efforts will have to be undertaken as well.

It is our understanding that the language for EN-17 will be amended to remove the words "meets or" in order to assure the County looks toward greater reduction efforts. In order to reflect both state law and best available science, the following changes should also be made to EN-17:

EN-17 Establish a countywide greenhouse gas reduction ~~target requirement~~ that ~~meets or~~ exceeds the statewide reduction requirement that is stated as the 2050 goal of a 50 percent reduction below 1990 levels and reflects King County's proportional share for achieving a reduction level based on current best available science.

In addition, because transportation represents 45% of Washington State's greenhouse gas emissions, it is critical for the greenhouse gas reduction requirements be included as a specific requirement in planning and funding the transportation system and planning development patterns. In order to implement this requirement, the following language should be added to the Transportation chapter:

New T Policy: The county's land use pattern and transportation system must be designed and operated to achieve the planned greenhouse reductions.

3. Transit-Oriented Communities

An overarching goal of Puget Sound Regional Council's *Vision 2040* states that "the region will focus growth within already urbanized areas to create walkable, compact, and Transit Oriented Communities that maintain

⁴ *Id.* at p. 9.

⁵ RCW 70.235.020(1)(a).

⁶ S. Gupta, D. A. Tirpak, N. Burger, J. Gupta, N. Höhne, A. I. Boncheva, G. M. Kanoan, C. Kolstad, J. A. Kruger, A. Michaelowa, S. Murase, J. Pershing, T. Saijo, A. Sari, 2007: *Policies, Instruments and Co-operative Arrangements* pp. 775 -76 in *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Accessed on December 10, 2009 at: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg3/ar4-wg3-chapter13.pdf>

unique local character.”⁷ Increased use of transit is one of the most important strategies for building healthier communities that support new local small businesses, provide new housing choices, and helps mitigate climate change. One of the best ways to support transit is to plan dense, vibrant station areas.

In 2009, Futurewise worked with the design firm GGLO and the advocacy group Transportation Choices Coalition to identify the best available research about what makes station areas successful. In our report, *Transit-Oriented Communities: A Blueprint for Washington State*,⁸ we outline the specific factors of different types of station areas that make them successful.

We appreciate that the interjurisdictional staff have already adopted several of the qualitative factors to consider in planning a station area. In addition, the following amendments to the Development Patterns Chapter, and especially the Urban Centers policies, are necessary:

DP-2 Promote a pattern of compact development within the UGA that includes housing at a range of transit-oriented urban densities, commercial and industrial development, and other urban facilities, including medical, governmental, institutional, and educational uses and parks and open space. The UGA will include a mix of uses that are convenient to and support public transportation in order to reduce reliance on single occupancy vehicle travel for most daily activities.

DP-28 Allow designation of new Urban Centers where the proposed Center:

- a) Meets the criteria for designation by the PSRC as a Regional Growth Center;
- b) Encompasses an area up to one and a half square miles; and
- c) Has adopted zoning regulations and infrastructure plans that are adequate to accommodate:
 - i. A minimum of 25,000 housing and job units, of which at least 15,000 must be housing units. 15,000 jobs within one-half mile of an existing or planned high-capacity transit station;
 - ii. At a minimum, an average of 50 employees per gross acre within the Urban Center;
 - iii. At a minimum, an average of 15-50 housing units per gross net acre within the Urban Center; and
 - iv. At least one housing unit for each job unit in the center.

DP-29 Adopt a map and housing and employment growth targets in city comprehensive plans for each Urban Center, and adopt policies to promote and maintain quality of life in the Center through:

- A broad mix of land uses that foster both daytime and nighttime activities and opportunities for social interaction;
- A range of affordable and healthy housing choices consistent with King County’s fair share housing methodology;
- Historic preservation and adaptive reuse of historic places;
- Parks and public open spaces that are accessible and beneficial to all residents in the Urban Center;
- Strategies to increase tree canopy within the Urban Center and incorporate low-impact development measures to minimize stormwater runoff;
- Facilities to meet human service needs;
- Superior urban design which reflects the local community vision for compact urban development;
- Pedestrian and bicycle mobility, transit use, and linkages between these modes;
- Planning for complete streets to provide safe and inviting access to multiple travel modes, especially bicycle and pedestrian travel; and

⁷ Puget Sound Regional Council, *Vision 2040 Part III: Multicounty Planning Policies* p. 45 (December 2009).

⁸ Futurewise, GGLO, and Transportation Choices Coalition, *Transit-Oriented Communities: A Blueprint for Washington State*, pp. 48 – 55 (2009). Available at: <http://futurewise.org/priorities/resources/publications/TOC%20Blueprint%20Final%2011-23-09%20for%20Website.pdf>.

- Parking management and other strategies that eliminate minimum motor-vehicle parking requirements, and minimize trips made by single-occupant vehicle, especially during peak commute periods.

Of special importance are the job and housing units criteria. For example, we know that car ownership increases rapidly at housing densities less than 50 housing units per net acre (0.7 to 2.5 cars/household, but flatten at densities more than 50 housing units per acre (0.3 to 0.7 cars/household).⁹ Similarly, 50 housing units per net acre is also the dividing line for amount of driving per household (30,000 to 6,000 miles/year compared with 6,000 to 4,000 miles/year).¹⁰ So, it's no surprise the 50 housing units per net acre is also the point at which the number of average household trips for transit, walking, and driving are all equal.¹¹

Changing the housing density requirement in DP-28 to 50 units per net acre should have minimal impact, if any, on currently designated Urban Centers. Any future areas considered for designation must meet this density requirement in order to be successful. The new density requirement will not require the site to be built to this housing intensity, but only to provide the sufficient capacity to allow for it to happen. Providing sufficient capacity is absolutely critical for driving the developer market to see potential in a stationary area.

4. Housing

Methodology for Targets

Providing sufficient housing is a moral, economic, and environmental concern. We need to ensure sufficient affordable housing so people can enjoy a reasonable standard of living. We need to ensure sufficient housing at the right prices, types, and locations so our businesses have a workforce to employ. And we need to ensure the housing is placed in the right locations so people do not have to drive far, saving their pocketbooks and the environment.

The current methodology undercounts the amount of necessary affordable housing. The percentage is based on the percentage of existing affordable housing and then projecting forward. When the amount of affordable housing is inadequate (as it is now), it's impossible to then build a sufficient amount for the future.

Instead, the methodology should start with the percentage of workers currently employed in the county that make 80% of AMI or less. Then, the methodology should add-in (1) a projection of the number of new workers over the next 20 years (adjusted for the number who will be 80% of AMI or less), (2) individuals on a fixed income due to retirement or other reason, and (3) the unemployed. Based on this sum, the countywide housing targets would be set.

As we encourage more people to live where they work, our housing policies should be similarly adjusted. In any given jurisdiction, a certain percentage of people work within the city and a certain percentage commute outside the city to work. For the percentage of people who work within the city, the housing targets should be based on the AMI within the city.

The practical effect would be that the methodology would no longer treat cities with lower real estate values as "taking" a disproportionate share of the affordable housing requirements of the county. Instead, they would be providing more affordable housing for their own workforce.

Measurement

For households, transportation is the second highest cost, right behind the cost of renting or home ownership. So, it makes logical sense that when the economy squeezes households budgets, the access to transportation choices is *the* critical factor as to which neighborhoods will experience the highest home mortgage foreclosures. A study by the Center for Neighborhood Technology and the Natural Resources Defense Council

⁹ *Id.* at pp. 24, Figure 2.

¹⁰ *Id.* at pp. 27, Figure 4.

¹¹ *Id.* at pp. 29, Figure 5.

examined the relationship of location, transit access, and foreclosures in Chicago and found an indisputable correlation.¹² So, in the effort to provide affordable housing, we should also be locating it near affordable transportation choices.

Just as the CPPs require detailed measurements for affordable housing, the CPPs must also require detailed measurements for the location of the housing as it relates to transportation. These requirements should not be meant to dictate whether affordable housing is built in one city or another, but to inform policy making within a given city as where to build housing as well as to encourage the new transit service to underserved neighborhoods.

Futurewise recommends the following necessary amendments:

Measuring Results

Maintaining timely and relevant data on housing markets and residential development allows the county and cities to evaluate the effectiveness of their housing strategies and to make appropriate changes to those strategies when and where needed. In assessing efforts to meet affordable housing targets, jurisdictions need to consider public actions taken to encourage development and preservation of very low-, low- and moderate-income housing, such as local funding, development code changes, improvements to transit access, and creation of new programs, as well as market and other factors that are beyond local government control. Further detail on monitoring procedures is contained in Appendix 4.

H-12 Monitor housing supply and affordability, including progress toward achieving affordable housing targets, both countywide and within each jurisdiction. Local and countywide monitoring should encompass:

- Number and type of new housing units;
- Number of units lost to demolition, redevelopment, or conversion to non-residential use;
- Number of new units that are affordable to very low, low, and moderate income households;
- Number of affordable units newly preserved and units acquired and rehabilitated with a regulatory agreement for long-term affordability for very low, low, and moderate income households;
- Housing market trends, including affordability of overall housing stock and affordability of census blocks within jurisdictions as affected by transportation costs;
- Changes in zoned capacity for housing;
- The number and nature of fair housing complaints; and
- Housing development and market trends in Urban Centers.

Together, by creating a better methodology for housing targets and by measuring the second highest household cost as a locational affordability issue, we will achieve needed results for a better economy and environment for all people.

5. Protect Rural Areas and Resource Lands

Vision 2040 and the Regional Growth Strategy set a clear direction to not expand Urban Growth Areas and to reduce projected new growth in rural areas. King County's rural, agricultural, and forested landscape are part of citizen's vision for a beautiful countryside, protection of ecological resources, and a local food and fiber economy. In addition, preservation of these areas and lands is critical for mitigating and adapting to climate change.

¹² Center for Neighborhood Technology and Natural Resources Defense Council, *Reducing Foreclosures and Environmental Impacts through Location-Efficient Neighborhood Design, 4-Pager* (Jan. 2010), Accessed on May 20, 2011. Available at (<http://www.nrdc.org/energy/files/LocationEfficiency4pgr.pdf>).

In order to stop sprawl and to protect existing resource industries, the following additional amendments need to be made:

DP-14 If expansion of the UGA is warranted based on the criteria in DP-13(a) or DP-13(b), add land to the UGA only if it meets all of the following criteria:

- a) ...
- g) Is consistent with the Regional Growth Strategy contained in Vision 2040 and shall be minor, less than 20 acres in size, unless a larger area is needed to accommodate family-wage jobs.

DP-45 Limit residential development in the Rural Area to housing at very low densities that are compatible with rural character, have available water resources, and comply with the following density guidelines:

- a) One home per 20 acres where a pattern of large lots exists and to buffer Forest Protection Districts and Agricultural Districts;
- b) One home per ten where the predominant lot size is less than 20 acres; or
- c) One home per five acres where the predominant lot size is less than ten acres.
- d) Allow limited clustering within development sites to avoid development on environmentally critical lands or on productive forest or agricultural lands, but not to exceed the density guidelines cited in (a) through (c).

DP-56 ~~Strongly Discourage~~ discourage incompatible land uses adjacent to designated Resource Lands to prevent interference with their continued use for the production of agricultural, mining, or forest products.

DP-61 Use transfer of development rights (TDR) to shift potential development from Rural and Resource lands into Urban areas, especially cities. Implement TDR within King County through a partnership between the county and cities that is designed to:

- ...;
- ~~Prohibit Permit existing King County allowance for very limited~~ transfers of development rights within the Rural Area; and
-

T-2 ~~Avoid Strictly limit~~ construction of major roads and capacity expansion on existing roads in Rural Areas and Resource Lands. ~~Where increased roadway capacity in the Rural Areas is warranted shall only be allowed to the extent warranted to support improve safety for pedestrians, bicyclists, and moving farm and forestry equipment. safe and efficient travel through Rural Areas, a~~ Appropriate rural development regulations and effective access management ~~should must~~ be in place prior to authorizing such capacity expansion in order to make more efficient use of existing roadway capacity and prevent unplanned growth in Rural Areas.

PFS-7 ~~Do not Plan-plan and-or~~ locate water systems in the Rural Area ~~that except as necessary to protect basic health, safety, and the environment; are sized to support only are appropriate for~~ rural uses and densities; ~~and are financially supportable at rural densities; are consistent with the available potable water supplies; and~~ do not increase the development potential of the Rural Area.

In addition, **Futurewise strongly supports PFS-12** which tightly proscribes the expansion of sewer systems into the rural area.

Farms and forests will also play a critical role in mitigating and adapting to climate change. Protect working forests, working farms, wetlands, and other carbon sinks from development. In 2005, forest land and land use sequestered an estimated 30 percent of Washington greenhouse gas emissions.¹³ Agricultural soils

¹³ S. Gupta, D. A. Tirpak, N. Burger, J. Gupta, N. Höhne, A. I. Boncheva, G. M. Kanoan, C. Kolstad, J. A. Kruger, A. Michaelowa, S. Murase, J. Pershing, T. Saijo, A. Sari, 2007: *Policies, Instruments and Co-operative Arrangements* pp. 775 - 76 in *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel*

sequestered an estimated 1.5 percent of the state's greenhouse gas emissions. Paving over forest land, farmlands, wetlands, and other carbon sinks will require us to reduce emissions even more than is currently required to achieve the state's adopted greenhouse gas reduction requirements. In order to support our local resource economy and to solve our climate change challenge, we recommend the following necessary amendment:

EN-16 Plan for land use patterns and transportation systems that ~~minimize-reduce~~ air pollution and greenhouse gas emissions, including:

- ...; and
- Maintain greenhouse sinks including forest lands, farmland, and wetlands.

These necessary amendments will help protect King County's rural character and foster a strong local food and resource economy while helping to solve climate change.

6. Environmental & Habitat Protection

Additional amendments are necessary to meet federal law, protect listed species, save Puget Sound, and adapt to climate change.

MPP-En-12 calls on the county and cities to "[p]reserve and restore native vegetation to protect habitat, especially where it contributes to the overall ecological function and where invasive species are a significant threat to native ecosystems." Research by the University of Washington in the Puget Sound lowlands has shown that when total impervious surfaces exceed five to 10 percent and forest cover declines below 65 percent of the basin, then salmon habitat in streams and rivers is adversely affected.¹⁴ As several University of Washington researchers wrote:

"Results of the PSL stream study have shown that physical, chemical, and biological characteristics of streams change with increasing urbanization in a continuous rather than threshold fashion. Although the patterns of change differed among the attributes studied and were more strongly evident for some than for others, physical and biological measures generally changed most rapidly during the initial phase of the urbanization process as % [total impervious area] TIA above the 5-10% range. As urbanization progressed, the rate of degradation of habitat and biologic integrity usually became more constant. There was also direct evidence that altered watershed hydrologic regime was the leading cause for the overall changes observed in instream physical habitat conditions.

...

The findings of this research indicate that there is a set of necessary, though not by themselves sufficient, conditions required to maintain a high level of stream quality or ecological integrity (physical, chemical, and biological). If maintenance of that level is the goal, then this set of enabling conditions constitutes standards that must be achieved if the goal is to be met. For the PSL streams, imperviousness must be limited (< 5-10 %TIA), unless mitigated by extensive riparian corridor

on *Climate Change* [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Accessed on Feb. 16, 2011 at: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg3/ar4-wg3-chapter13.pdf>.

¹⁴ Derek B. Booth, Ph.D., P.E. *Forest Cover, Impervious-surface Area, and the Mitigation of Urbanization Impacts in King County, Washington* p. 13 (University of Washington, Seattle Washington: September 2000). Accessed on Feb. 17, 2011 at: <http://depts.washington.edu/cuwrn/research/forest.pdf>.

See also David Hartley, Senior Watershed Hydrologist and Gino Lucchetti, Senior Ecologist, King County DNR-WLRD to the Tri-County ESA Stormwater Group, Memo Re: Forest Retention, Runoff Response, and Implications (August 2000). Accessed on Feb. 17, 2011 at:

http://www.psparchives.com/publications/our_work/stormwater/lid/clearing_grading/Forest%20Retention.doc.

See also King County Executive Report, *Best Available Science, Volume 1: A Review of Science Literature, Critical Areas, Stormwater, and Clearing and Grading Proposed Ordinances Chapter 7 – Aquatic Areas* pp. 7-26 – 7-27 (February 2004), accessed on Feb. 17, 2011 at: <http://www.kingcounty.gov/property/permits/codes/CAO.aspx#best>.

protection and BMPs. Downstream changes to both the form and function of stream systems appear to be inevitable unless limits are placed on the extent of urban development.”¹⁵

Professor Derek Booth described how modeling by King County showed that the 65 percent forest retention requirement “just met” the criteria for maintaining stream health in the till soils of the Puget Sound lowlands. Clearing more than 65 percent of a basin increased flows so that they became destructive of streams and salmon habitat.

The adverse effects of urbanization include “extensive changes in basin hydrologic regime, channel morphologic features, and physio-chemical water quality.”¹⁶ These hydrologic changes include increases in peak runoff and reduced subsurface flows. These then result in higher winter flows, which can blast our stream channels and instream habitat. It also results in lower summer and fall stream flows, which contributes to higher temperatures, low oxygen, and other adverse impacts on salmon habitat. So recommend that a countywide planning policy be adopted to maintain habitat functions including instream habitat.

In order to protect the environment and habitat, the following changes are needed:

EN-2 ~~Encourage~~ Require low impact development approaches for managing stormwater, protecting water quality, minimizing flooding and erosion, protecting habitat, and reducing greenhouse gas emissions.

EN-4 Identify and preserve regionally significant open space networks in both Urban and Rural Areas. Develop strategies and funding to protect lands that provide the following valuable functions:

- ...
- ~~Wildlife-h~~ Habitat or migration corridors that preserve and enhance ecosystem resiliency in the face of urbanization and climate change;¹⁷
-

EN-6 Coordinate approaches and standards for ~~defining~~ designating and protecting critical areas especially where such areas and impacts to them cross jurisdictional boundaries.

New EN Policy: Preserve and restore native vegetation and limit impervious surfaces to protect habitat, including habitats in streams, rivers, lakes, and Puget Sound and water quality.

In addition, the CPPs need to fully implement the biological opinion for the federal flood insurance program under the Federal Emergency Management Act.¹⁸ The requirements of the biological opinion will reduce

¹⁵ *Id.*

¹⁶ Christopher W. May, Richard R. Horner, James R. Karr, Brian W. Mar, Eugene B. Welch, *The Cumulative Effects of Urbanization on Small Streams in the Puget Sound Lowland Ecoregion* p. 2 of 26 (University of Washington, Seattle Washington).

¹⁷ Habitat protection is needed for more than just wildlife. Endangered, threatened, and sensitive fish, plants, insects, and other living organisms merit open space protection as well, and not just for the sake of wildlife.

¹⁸ You can find the biological opinion at in the following three documents:

Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the on-going National Flood Insurance Program carried out in the Puget Sound area in Washington State. National Marine Fisheries Service (Sept. 22, 2008) accessed on May 20, 2011 at: https://pcts.nmfs.noaa.gov/pls/pcts-pub/sxn7.pcts_upload.download?p_file=F3181/200600472_fema_nfip_09-22-2008.pdf

Notice of Error and Correction in Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the on-going National Flood Insurance Program carried out in the Puget Sound area in Washington State. National Marine Fisheries Service (Oct. 23, 2008) accessed on May 20, 2011 at: https://pcts.nmfs.noaa.gov/pls/pcts-pub/sxn7.pcts_upload.download?p_file=F13403/200600472_FEMANFIP_errata_10-23-2008.pdf

hazards to human life and property by decreasing the likelihood that flood plain development will increase flood heights and therefore risks to life and property and protect important fish and wildlife habitats. We recommend the CPPs call for fully implementing the biological opinion by adopting the amending EN-11 with the necessary change:

EN-11 Work cooperatively to meet regulatory standards for floodplain development as these standards are updated ~~for consistency with~~ **to implement** relevant federal requirements including those related to the Endangered Species Act.

These necessary amendments will help meet federal law, protect listed species, save Puget Sound, and adapt to climate change.

Thank you for considering our recommendations. Please call me at 206-343-0681 ext. 112 or brock@futurewise.org if you would like additional information.

Sincerely,

Brock Howell
King County Program Director
Futurewise

Enclosure: All Necessary Changes Recommended by Futurewise

Second Notice of Error and Correction in Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the on-going National Flood Insurance Program carried out in the Puget Sound area in Washington State. HUC 17110020 Puget Sound. National Marine Fisheries Service (May 14, 2009) accessed on May 20, 2011 at:
https://pcts.nmfs.noaa.gov/pls/pcts-pub/sxn7.pcts_upload.download?p_file=F22552/200600472_FEMANFIP_errata2_05-14-2009.pdf

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May 20, 2011

Environment

EN-2 ~~Encourage~~Require low impact development approaches for managing stormwater, protecting water quality, minimizing flooding and erosion, protecting habitat, and reducing greenhouse gas emissions.

EN-4 Identify and preserve regionally significant open space networks in both Urban and Rural Areas. Develop strategies and funding to protect lands that provide the following valuable functions:

- Physical or visual separation delineating growth boundaries or providing buffers between incompatible uses;
- Active and passive outdoor recreation opportunities;
- ~~Wildlife-h~~Habitat or migration corridors that preserve and enhance ecosystem resiliency in the face of urbanization and climate change;
- Preservation of ecologically sensitive, scenic or cultural resources;
- Urban green space, habitats, and ecosystems;
- Forest resources; or
- Food production potential.

EN-6 Coordinate approaches and standards for ~~defining~~designating and protecting critical areas especially where such areas and impacts to them cross jurisdictional boundaries.

EN-New Preserve and restore native vegetation and limit impervious surfaces to protect habitat, including habitats in streams, rivers, lakes, and Puget Sound and water quality.

EN-11 Work cooperatively to meet regulatory standards for floodplain development as these standards are updated ~~for consistency with~~to implement relevant federal requirements including those related to the Endangered Species Act.

EN-16 Plan for land use patterns and transportation systems that ~~minimize~~reduce air pollution and greenhouse gas emissions, including:

- Maintaining or exceeding existing standards for carbon monoxide, ozone, and
- particulates;
- Directing growth to urban centers and other mixed use/ high density locations that
- support mass transit, encourage non-motorized modes of travel and reduce trip
- lengths;
- Facilitating modes of travel other than single occupancy vehicles including transit,
- walking, bicycling, and carpooling;
- Incorporating energy-saving strategies in infrastructure planning and design;
- Encouraging new development to use low emission construction practices, low or
- zero net lifetime energy requirements and “green” building techniques; and
- Increasing use of low ~~and no~~ emission vehicles, such as efficient electric-powered vehicles.
- Maintain greenhouse sinks including forest lands, farmland, and wetlands.

EN-17 Establish a countywide greenhouse gas reduction ~~target requirement~~ that ~~meets or~~ exceeds the statewide reduction requirement that is stated as the 2050 goal of a 50 percent reduction below 1990 levels and reflects King County’s proportional share for achieving a reduction level based on current best available science.

Development Patterns

DP-2 Promote a pattern of compact development within the UGA that includes housing at a range of transit-oriented urban densities, commercial and industrial development, and other urban facilities, including medical, governmental, institutional, and educational uses and parks and open space. The UGA will include a mix of uses that are convenient to and support public transportation in order to reduce reliance on single occupancy vehicle travel for most daily activities.

DP-4 Concentrate housing and employment growth within the designated Urban Growth Area, consistent with Vision 2040 and the regional growth strategy. Focus housing growth within countywide designated Urban Centers and locally designated centers. Focus employment growth within countywide designated Urban and Manufacturing/Industrial Centers and with locally designated centers.

DP-8 Allocate residential and employment growth to each city and unincorporated urban area in the county to meet the following objectives:

- To accommodate the most recent 20-year population projection from the state Office of Financial Management and the most recent 20-year regional employment forecast from the Puget Sound Regional Council within the existing urban growth area;
- To plan for a pattern of growth that is consistent with implements the Regional Growth Strategy contained in VISION 2040 including focused growth within cities with countywide designated centers and within other larger cities, limited development in the Rural Areas, and protection of designated Resource Lands;
- To efficiently utilize existing zoned and future planned development capacity as well as the capacity of existing and planned infrastructure, including sewer and water systems;
- To promote a land use pattern that can be served by a connected network of public transportation services and facilities and pedestrian and bicycle infrastructure and amenities;
- To improve the jobs/housing balance within the region and the county;
- To promote sufficient opportunities for housing and employment development throughout the UGA;
- To allocate growth to individual Potential Annexation Areas (PAAs) within the Urban unincorporated area consistent with as guided by the capacity for housing and employment growth within each PAA when consistent with the Regional Growth Strategy contained in Vision 2040.

DP-11 Review the UGA at least every ~~ten~~eight years. This review shall consider monitoring reports and other available data. As a result of this review, and based on the criteria established in policies DP-12 and DP-13, the GMPC may recommend amendments to the CPPs and King County Comprehensive Plan that make changes to the UGA boundary.

Comment to Proposed DP-11 Amendment:

State legislation just passed in the 2011 session changed the UGA update calendar from 10 to 8 years to be consistent with the comprehensive plan update calendar.

DP-14 If expansion of the UGA is warranted based on the criteria in DP-13(a) or DP-13(b), add land to the UGA only if it meets all of the following criteria:

- h) Is adjacent to the existing UGA and is no larger than necessary to promote compact development that accommodates anticipated growth needs;
- i) Can be efficiently provided with urban services and does not require supportive facilities located in the Rural Area;
- j) Follows topographical features that form natural boundaries, such as rivers and ridge lines and does not extend beyond natural boundaries, such as watersheds, that impede the provision of urban services;
- k) Is not currently designated as Resource land;
- l) Is sufficiently free of environmental constraints to be able to support urban development without significant adverse environmental impacts, unless the area is designated as an Urban Separator by interlocal agreement between King County and the annexing city; and

- m) Is subject to an agreement between King County and the city or town adjacent to the area that the area will be added to the city's Potential Annexation Area (PAA). Upon ratification of the amendment, the CPPs will reflect both the UGA change and PAA change.
- n) Is consistent with the Regional Growth Strategy contained in Vision 2040 and shall be minor, less than 20 acres in size, unless a larger area is needed to accommodate family-wage jobs.

DP-16 Conduct a buildable lands program that meets or exceeds the review and evaluation requirements of the Growth Management Act. The purposes of the buildable lands program are:

- To collect and analyze data on development activity, land supply, and capacity for residential, commercial, and industrial land uses;
- To evaluate the consistency of actual development densities with current comprehensive plans; and
- To evaluate the sufficiency of land-zoned capacity to accommodate growth for the remainder of the planning period.

Comment to Proposed DP-16 Amendment:

This amendment attempts to reframe how we consider development capacity. Too often public officials and planners believe new *land* is needed to accommodate growth when more often increased zoned capacity is less expensive and will better meet the community's shared vision and values for a healthy, livable community with lower transportation costs and saved local farmland.

DP-28 Allow designation of new Urban Centers where the proposed Center:

- d) Meets the criteria for designation by the PSRC as a Regional Growth Center;
- e) Encompasses an area up to one and a half square miles; and
- f) Has adopted zoning regulations and infrastructure plans that are adequate to accommodate:
 - v. A minimum of 25,000 housing and job units, of which at least 15,000 must be housing units, 15,000 jobs within one-half mile of an existing or planned high-capacity transit station;
 - vi. At a minimum, an average of 50 employees per gross acre within the Urban Center;
 - vii. At a minimum, an average of 45-50 housing units per gross-net acre within the Urban Center; and
 - viii. At least one housing unit for each job unit in the center.

DP-29 Adopt a map and housing and employment growth targets in city comprehensive plans for each Urban Center, and adopt policies to promote and maintain quality of life in the Center through:

- A broad mix of land uses that foster both daytime and nighttime activities and opportunities for social interaction;
- A range of affordable and healthy housing choices consistent with King County's fair share housing methodology;
- Historic preservation and adaptive reuse of historic places;
- Parks and public open spaces that are accessible and beneficial to all residents in the Urban Center;
- Strategies to increase tree canopy within the Urban Center and incorporate low-impact development measures to minimize stormwater runoff;
- Facilities to meet human service needs;
- Superior urban design which reflects the local community vision for compact urban development;
- Pedestrian and bicycle mobility, transit use, and linkages between these modes;
- Planning for complete streets to provide safe and inviting access to multiple travel modes, especially bicycle and pedestrian travel; and
- Parking management and other strategies that eliminate minimum motor-vehicle parking requirements, and minimize trips made by single-occupant vehicle, especially during peak commute periods.

DP-44 ~~Limit~~ Reduce projected growth in the Rural Area to prevent sprawl and the overburdening of rural services, reduce the need for new rural infrastructure, maintain rural character, and protect the natural environment.

DP-45 Limit residential development in the Rural Area to housing at very low densities that are compatible with rural character, have available water resources, and comply with the following density guidelines:

- e) One home per 20 acres where a pattern of large lots exists and to buffer Forest Protection Districts and Agricultural Districts;
- f) One home per ten where the predominant lot size is less than 20 acres; or
- g) One home per five acres where the predominant lot size is less than ten acres.
- h) Allow limited clustering within development sites to avoid development on environmentally critical lands or on productive forest or agricultural lands, but not to exceed the density guidelines cited in (a) through (c).

DP-56 Strongly ~~Dis~~courage incompatible land uses adjacent to designated Resource Lands to prevent interference with their continued use for the production of agricultural, mining, or forest products.

DP-61 Use transfer of development rights (TDR) to shift potential development from Rural and Resource lands into Urban areas, especially cities. Implement TDR within King County through a partnership between the county and cities that is designed to:

- Identify Rural and Resource sending sites that satisfy countywide conservation goals and are consistent with regionally coordinated TDR efforts;
- Preserve rural and resource lands of compelling interest countywide and to participating cities;
- Identify appropriate TDR receiving areas within cities;
- Identify incentives for city participation in regional TDR (i.e. county-to-city TDR);
- Develop Interlocal Agreements that allow Rural and Resource land development rights to be used in city receiving areas;
- Identify and secure opportunities to fund or finance infrastructure within city TDR receiving areas;
- Prohibit Permit existing King County allowance for very limited transfers of development rights within the Rural Area; and
- Permit existing within-city TDR programs.

Housing

Measuring Results

Maintaining timely and relevant data on housing markets and residential development allows the county and cities to evaluate the effectiveness of their housing strategies and to make appropriate changes to those strategies when and where needed. In assessing efforts to meet affordable housing targets, jurisdictions need to consider public actions taken to encourage development and preservation of very low-, low- and moderate-income housing, such as local funding, development code changes, improvements to transit access, and creation of new programs, as well as market and other factors that are beyond local government control. Further detail on monitoring procedures is contained in Appendix 4.

H-12 Monitor housing supply and affordability, including progress toward achieving affordable housing targets, both countywide and within each jurisdiction. Local and countywide monitoring should encompass:

- Number and type of new housing units;
- Number of units lost to demolition, redevelopment, or conversion to non-residential use;
- Number of new units that are affordable to very low, low, and moderate income households;
- Number of affordable units newly preserved and units acquired and rehabilitated with a regulatory agreement for long-term affordability for very low, low, and moderate income households;
- Housing market trends, including affordability of overall housing stock and affordability of census blocks within jurisdictions as affected by transportation costs;
- Changes in zoned capacity for housing;
- The number and nature of fair housing complaints; and

- Housing development and market trends in Urban Centers.

Transportation

T-2 ~~Avoid. Strictly limit~~ construction of major roads and capacity expansion on existing roads in Rural Areas and Resource Lands. ~~Where increased roadway capacity in the Rural Areas is warranted, shall only be allowed to the extent warranted to support improve safety for pedestrians, bicyclists, and moving farm and forestry equipment. safe and efficient travel through Rural Areas, a~~ Appropriate rural development regulations and effective access management ~~should must~~ be in place prior to authorizing such capacity expansion in order to make more efficient use of existing roadway capacity and prevent unplanned growth in Rural Areas.

T-3 Increase the share of trips made countywide by modes other than driving alone through coordinated land use planning, public and private investment, and programs focused on centers and connecting corridors, consistent with locally adopted mode split goals while reducing or holding flat the total number of single-occupancy vehicle trips.

T-New: The county's land use pattern and transportation system must be designed and operated to achieve the planned greenhouse reductions.

Public Facilities & Services

PFS-3 Cities are the appropriate providers of services to the UGA, either directly or by contract. Extend urban services through the use of special districts only where there are agreements with the city in whose Potential Annexation Area the extension is proposed. Within the UGA, as time and conditions warrant, cities will assume local urban services provided by special service districts. Encourage special service districts, including sewer, water, and fire districts, to consolidate or dissolve as their functions are transferred to general purpose governments.

PFS-7 ~~Do not Plan-plan and-or~~ locate water systems in the Rural Area ~~that except as necessary to protect basic health, safety, and the environment; are sized to support only are appropriate for rural uses and densities; and are financially supportable at rural densities; are consistent with the available potable water supplies; and~~ do not increase the development potential of the Rural Area.